| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Durgaparameshwari Layout 4th Main | | | | | | | | | |
| | Deduct 35 % of open space | | | 2 | 207.00 | | 0.90 | 372.60 | | |
| | Total Qty | | | | | | | **1733.40** | | |
| | | | | | | | | -606.69 | | |
| | | | | | | | | **1126.71** | | |
| | Basic Rate | 105.00 | | | | | | **3726.81** | 111.30 | **414794.00** |
| | Area Weightage @ 6% | 6.30 | | | | | | | | |
| | Total | **111.30** | | | | | | | | |
| 3 | Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete **Page No. 27 / Item No. 5.31.1 PWD SR 2018-19** | | | | | | | | | |
| | Damaged Slabs & Missing Slabs 35% | Sqm | | | Vide Item No. 2 | | | 910.04 | | |
| | Basic Rate | 700.00 | | | | | | **910.04** | 742.00 | **675246.00** |
| | Area Weightage @ 6% | 42.00 | | | | | | | | |
| | **Total** | **742.00** | | | | | | | | |
| 4 | KSRRB 300-49. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by manual means without disturbing the base and stacking of the debris materials including cost of all labour charges complete as per specifications. MORTH / Chapter 3 **Page No. 146 / Item No. 19.55 PWD SR 2018-19** | Sqm | | | | | | | | |
| | Durgaparameshwari Layout 1st Cross | | 1 | 149.00 | 5.50 | | 819.50 | | | |
| | Durgaparameshwari Layout 2nd Cross | | 1 | 218.00 | 5.50 | | 1199.00 | | | |
| | Durgaparameshwari Layout 2nd Main | | 1 | 94.00 | 5.00 | | 470.00 | | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross N/S | | 1 | 43.00 | 4.00 | | 172.00 | | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross S/S | | 1 | 32.00 | 4.00 | | 128.00 | | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross N/S | | 1 | 25.00 | 4.00 | | 100.00 | | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross S/S | | 1 | 31.00 | 4.00 | | 124.00 | | | |
| | Durgaparameshwari Layout 3rd Main | | 1 | 164.00 | 5.00 | | 820.00 | | | |
| | Durgaparameshwari Layout 4th Main | | 1 | 45.00 | 5.00 | | 225.00 | | | |
| | Total Qty | | | | | | **4057.50** | | | |
| | Consider 35% of the Total Qty | | | | | | **1420.13** | 95.40 | **135480.00** | |
| | Basic Rate | 90.00 | | | | | | | | |
| | Area Weightage @ 6% | 5.40 | | | | | | | | |
| | Total | **95.40** | | | | | | | | |
| 5 | KSRRB M400- Wet Mix Macadam KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 **Page No. 155 / Item No. 20.18, PWD SR 2018-19** | Cum | | | | | | | | |
| | Durgaparameshwari Layout 1st Cross | | 1 | 149.00 | 5.50 | 0.23 | 188.49 | | | |
| | Durgaparameshwari Layout 2nd Cross | | 1 | 218.00 | 5.50 | 0.23 | 275.77 | | | |
| | Durgaparameshwari Layout 2nd Main | | 1 | 94.00 | 5.00 | 0.23 | 108.10 | | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross N/S | | 1 | 43.00 | 4.00 | 0.23 | 39.56 | | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross S/S | | 1 | 32.00 | 4.00 | 0.23 | 29.44 | | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross N/S | | 1 | 25.00 | 4.00 | 0.23 | 23.00 | | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross S/S | | 1 | 31.00 | 4.00 | 0.23 | 28.52 | | | |
| | Durgaparameshwari Layout 3rd Main | | 1 | 164.00 | 5.00 | 0.23 | 188.60 | | | |
| | Durgaparameshwari Layout 4th Main | | 1 | 207.00 | 5.00 | 0.23 | 238.05 | | | |
| | Total Qty | | | | | | **1119.53** | | | |
| | Consider 35% of the Total Qty | | | | | | **391.83** | 2001.28 | **784169.00** | |

| | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | Basic Rate | 1888.00 | | | | | | | |
| | Area Weightage @ 6% | 113.28 | | | | | | | |
| | Total | **2001.28** | | | | | | | |
| 6 | KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH Specification No. 502 **Page No. 158 / Item No. 21.6, PWD SR 2018-19** | Sqm | | | | | | | |
| | Durgaparameshwari Layout 1st Cross | | 1 | 149.00 | 5.50 | | 819.50 | | |
| | Durgaparameshwari Layout 2nd Cross | | 1 | 218.00 | 5.50 | | 1199.00 | | |
| | Durgaparameshwari Layout 2nd Main | | 1 | 94.00 | 5.00 | | 470.00 | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross N/S | | 1 | 43.00 | 4.00 | | 172.00 | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross S/S | | 1 | 32.00 | 4.00 | | 128.00 | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross N/S | | 1 | 25.00 | 4.00 | | 100.00 | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross S/S | | 1 | 31.00 | 4.00 | | 124.00 | | |
| | Durgaparameshwari Layout 3rd Main | | 1 | 164.00 | 5.00 | | 820.00 | | |
| | Durgaparameshwari Layout 4th Main | | 1 | 207.00 | 5.00 | | 1035.00 | | |
| | Total Qty | | | | | | **4867.50** | | |
| | Consider 35% of the Total Qty | | | | | | **1703.63** | 36.04 | **61399.00** |
| | Basic Rate | 34.00 | | | | | | | |
| | Area Weightage @ 6% | 2.04 | | | | | | | |
| | Total | **36.04** | | | | | | | |
| 7 | KSRRB 500-11. Providing and laying **bituminous macadam** on prepared surface with crushed coarse aggregates as per design mix formula for base / binding course including loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant, transporting the mixd material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve the desired density, but excluding cost of primer / tack coat including lead, lift and cost of all materials, labour, HOM of machineries complete as per specifications. MORTH /Chapter 5 - using **40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 3.3 % VG-30 Bitumen Page No. 159 / Item No. 21.11.6, PWD SR 2018-19** | Cum | | | | | | | |
| | Durgaparameshwari Layout 1st Cross | | 1 | 149.00 | 5.50 | 0.05 | 40.98 | | |
| | Durgaparameshwari Layout 2nd Cross | | 1 | 218.00 | 5.50 | 0.05 | 59.95 | | |
| | Durgaparameshwari Layout 2nd Main | | 1 | 94.00 | 5.00 | 0.05 | 23.50 | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross N/S | | 1 | 43.00 | 4.00 | 0.05 | 8.60 | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross S/S | | 1 | 32.00 | 4.00 | 0.05 | 6.40 | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross N/S | | 1 | 25.00 | 4.00 | 0.05 | 5.00 | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross S/S | | 1 | 31.00 | 4.00 | 0.05 | 6.20 | | |
| | Durgaparameshwari Layout 3rd Main | | 1 | 164.00 | 5.00 | 0.05 | 41.00 | | |
| | Durgaparameshwari Layout 4th Main | | 1 | 207.00 | 5.00 | 0.05 | 51.75 | | |
| | Total Qty | | | | | | **243.38** | | |
| | Consider 35% of the Total Qty | | | | | | **85.18** | 5551.22 | **472860.00** |
| | Basic Rate | 5237.00 | | | | | | | |
| | Area Weightage @ 6% | 314.22 | | | | | | | |
| | Total | **5551.22** | | | | | | | |

| | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 8 | KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501 **Page No. 158 / Item No. 21.2, PWD SR 2018-19** | Sqm | | | | | | | |
| | Durgaparameshwari Layout 1st Cross | | 1 | 149.00 | 5.50 | | 819.50 | | |
| | Durgaparameshwari Layout 2nd Cross | | 1 | 218.00 | 5.50 | | 1199.00 | | |
| | Durgaparameshwari Layout 2nd Main | | 1 | 94.00 | 5.00 | | 470.00 | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross N/S | | 1 | 43.00 | 4.00 | | 172.00 | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross S/S | | 1 | 32.00 | 4.00 | | 128.00 | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross N/S | | 1 | 25.00 | 4.00 | | 100.00 | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross S/S | | 1 | 31.00 | 4.00 | | 124.00 | | |
| | Durgaparameshwari Layout 3rd Main | | 1 | 164.00 | 5.00 | | 820.00 | | |
| | Durgaparameshwari Layout 4th Main | | 1 | 207.00 | 5.00 | | 1035.00 | | |
| | Total Qty | | | | | | **4867.50** | 5.30 | **25798.00** |
| | Basic Rate | 5.00 | | | | | | | |
| | Area Weightage @ 6% | 0.30 | | | | | | | |
| | Total | **5.30** | | | | | | | |
| 9 | KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 **Page No. 158 / Item No. 21.7 PWD** | Sqm | | | | | | | |
| | | | Qty Vide Item No. 8 | | | | 4867.50 | | |
| | asper Revised Basic Rate | 14.00 | | | | | **4867.50** | 14.84 | **72234.00** |
| | Area Weightage @ 6% | 0.84 | | | | | | | |
| | Total | **14.84** | | | | | | | |
| 10 | KSRRB M500-19. Providing and laying **bituminous concrete 40 mm thick** with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.9 complete in all respects complete as per specifications. MORTH Specification No. 509 - **using 40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 45 mm) with 6 % VG-30 Bitumen Page No. 162 / Item No. 21.22.6, PWD SR 2018-19** | Cum | | | | | | | |
| | Durgaparameshwari Layout 1st Cross | | 1 | 149.00 | 5.50 | 0.040 | 32.78 | | |
| | Durgaparameshwari Layout 2nd Cross | | 1 | 218.00 | 5.50 | 0.040 | 47.96 | | |
| | Durgaparameshwari Layout 2nd Main | | 1 | 94.00 | 5.00 | 0.040 | 18.80 | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross N/S | | 1 | 43.00 | 4.00 | 0.040 | 6.88 | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross S/S | | 1 | 32.00 | 4.00 | 0.040 | 5.12 | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross N/S | | 1 | 25.00 | 4.00 | 0.040 | 4.00 | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross S/S | | 1 | 31.00 | 4.00 | 0.040 | 4.96 | | |
| | Durgaparameshwari Layout 3rd Main | | 1 | 164.00 | 5.00 | 0.040 | 32.80 | | |
| | Durgaparameshwari Layout 4th Main | | 1 | 207.00 | 5.00 | 0.040 | 41.40 | | |
| | Revised Basic Rate | 7464.00 | | | | | **194.70** | 7911.84 | **1540435.00** |
| | Area Weightage @ 6% | 447.84 | | | | | | | |
| | Total | **7911.84** | | | | | | | |

| Sl. No | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 11 | KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 **Page No. 182, Item No. 24.15 PWD SR 2018-19** | | | | | | | | |
| | Durgaparameshwari Layout 1st Cross | Sqm | 2 | 149.00 | 0.10 | | 29.80 | | |
| | Durgaparameshwari Layout 2nd Cross | | 2 | 218.00 | 0.10 | | 43.60 | | |
| | Durgaparameshwari Layout 2nd Main | | 2 | 94.00 | 0.10 | | 18.80 | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross N/S | | 2 | 43.00 | 0.10 | | 8.60 | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross S/S | | 2 | 32.00 | 0.10 | | 6.40 | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross N/S | | 2 | 25.00 | 0.10 | | 5.00 | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross S/S | | 2 | 31.00 | 0.10 | | 6.20 | | |
| | Durgaparameshwari Layout 3rd Main | | 2 | 164.00 | 0.10 | | 32.80 | | |
| | Durgaparameshwari Layout 4th Main | | 2 | 207.00 | 0.10 | | 41.40 | | |
| | Revised Basic Rate | 429.00 | | | | | **192.60** | 454.74 | **87583.00** |
| | Area Weightage @ 6% | 25.74 | | | | | | | |
| | Total | **454.74** | | | | | | | |
| | Sub Total | | | | | | | | **4463969.00** |
| | GST @ 12% | | | | | | | | **535676.00** |
| | Miscellaneous and other Charges | L/S | | | | | | | **355.00** |
| | | | | | | | | Total | **5000000.00** |

**Rupees Fifty Lakh(s) Only**

**CERTIFICATE:**

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per PWD SR of 2018-19.
3 This work included under 2018-19 POW Grants.
4 The provisions were made in this estimate are necessary and adequate.
5 This works come under B.B.M.P. limits.

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Vidayranyapura Sub Division

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division
06/07

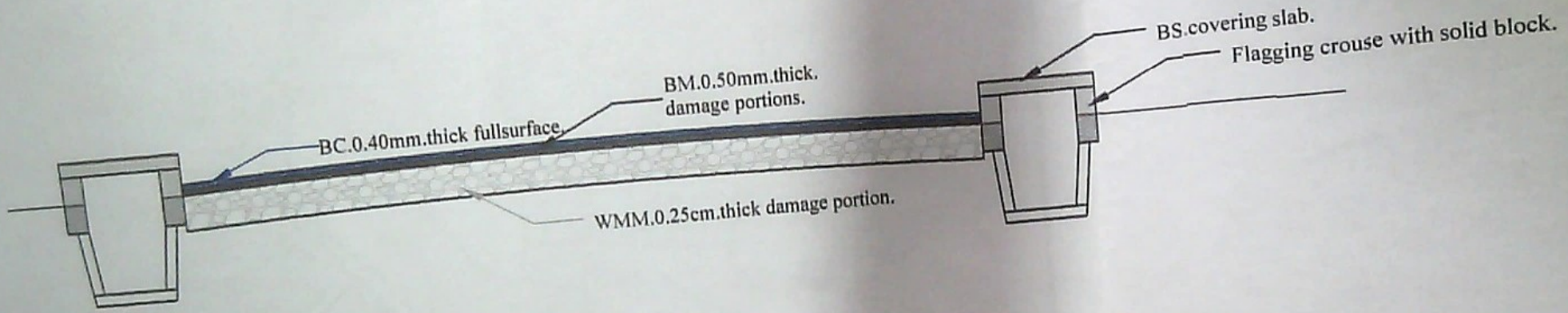
**Administrative Approval**

Accorded For ..... RS.SD.Wlaccheudy
Head of A/C..... P1221
CER NO :..... 65 Dt:..... 10.07.2019

TA CE (YNK)

Technical Sanction
Accorded For ..... RS.SD.Wlaccheudy
Head of A/C..... P1221
CER NO :..... 44 Dt:..... 10.07.2019

TA CE (YNK)




CROSS SECTION OF ASPHALT ROAD.

# BRUHAT BANGALORE MAHANAGARA PALIKE
## YELAHANKA ZONE

**Name of the work: Estimate for Improvements and Asphalting to Roads at Durgaparameshwari Layout and Surrounding areas in Ward No. 09 (Vidyaranyapura), Vidyaranyapura Sub Division.**

**Estimate Cost: 5000000.00**

| Sl. No | Description | Unit | No. | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| 1 | KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 **Page No. 143 / Item No. 19.1, PWD SR 2018-19** | Cum | | | | | | | |
| | For Drain Desilting | | | | | | | | |
| | Durgaparameshwari Layout 1st Cross | | 2 | 149.00 | 0.45 | 0.45 | 60.35 | | |
| | Durgaparameshwari Layout 2nd Cross | | 2 | 218.00 | 0.45 | 0.45 | 88.29 | | |
| | Durgaparameshwari Layout 2nd Main | | 2 | 94.00 | 0.45 | 0.45 | 38.07 | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross N/S | | 2 | 43.00 | 0.45 | 0.45 | 17.42 | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross S/S | | 2 | 32.00 | 0.45 | 0.45 | 12.96 | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross N/S | | 2 | 25.00 | 0.45 | 0.45 | 10.13 | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross S/S | | 2 | 31.00 | 0.45 | 0.45 | 12.56 | | |
| | Durgaparameshwari Layout 3rd Main | | 2 | 164.00 | 0.45 | 0.45 | 66.42 | | |
| | Durgaparameshwari Layout 4th Main | | 2 | 207.00 | 0.45 | 0.45 | 83.84 | | |
| | Berm Cutting | | | | | | | | |
| | Durgaparameshwari Layout 1st Cross | | 2 | 149.00 | 0.90 | 0.20 | 53.64 | | |
| | Durgaparameshwari Layout 2nd Cross | | 2 | 218.00 | 0.90 | 0.20 | 78.48 | | |
| | Durgaparameshwari Layout 2nd Main | | 2 | 94.00 | 0.90 | 0.20 | 33.84 | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross N/S | | 2 | 43.00 | 0.90 | 0.20 | 15.48 | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross S/S | | 2 | 32.00 | 0.90 | 0.20 | 11.52 | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross N/S | | 2 | 25.00 | 0.90 | 0.25 | 11.25 | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross S/S | | 2 | 31.00 | 0.90 | 0.25 | 13.95 | | |
| | Durgaparameshwari Layout 3rd Main | | 2 | 164.00 | 0.90 | 0.25 | 73.80 | | |
| | Durgaparameshwari Layout 4th Main | | 2 | 207.00 | 0.90 | 0.25 | 93.15 | | |
| | | | | | | | **775.13** | 250.24 | **193971.00** |
| | Basic Rate | 130.00 | | | | | | | |
| | Add loading and unloading Charges **It No 17.1 KSRRB M 100-1** | 68.00 | | | | | | | |
| | Average weight of earth 1.28 tonne / kg for 11.90 Km = 1.28 T X 11.90Km X 2.5 / km= 38.08 | 38.08 | | | | | | | |
| | | **236.08** | | | | | | | |
| | Area Weightage @6% | 14.16 | | | | | | | |
| | **Total** | **250.24** | | | | | | | |
| 2 | Removing and refixing stone slabs of drains and pointing in CM (1:3) **Page No. 27 / Item No. 5.33 PWD SR 2018-** | Sqm | | | | | | | |
| | BS Slab Drain | | | | | | | | |
| | Durgaparameshwari Layout 1st Cross | | 2 | 149.00 | | 1.35 | 402.30 | | |
| | Durgaparameshwari Layout 2nd Cross | | 2 | 218.00 | | 1.35 | 588.60 | | |
| | Durgaparameshwari Layout 2nd Main | | 2 | 94.00 | | 1.35 | 253.80 | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross N/S | | 2 | 43.00 | | 1.35 | 116.10 | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross S/S | | 2 | 32.00 | | 1.35 | 86.40 | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross N/S | | 2 | 25.00 | | 1.35 | 67.50 | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross S/S | | 2 | 31.00 | | 1.35 | 83.70 | | |
| | Durgaparameshwari Layout 3rd Main | | 2 | 164.00 | | 1.35 | 442.80 | | |
| | Durgaparameshwari Layout 4th Main | | 2 | 207.00 | | 1.35 | 558.90 | | |
| | BS Slab Drain Covering Slab | | | | | | **2600.10** | | |
| | Durgaparameshwari Layout 1st Cross | | 2 | 149.00 | | 0.90 | 268.20 | | |
| | Durgaparameshwari Layout 2nd Cross | | 2 | 218.00 | | 0.90 | 392.40 | | |
| | Durgaparameshwari Layout 2nd Main | | 2 | 94.00 | | 0.90 | 169.20 | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross N/S | | 2 | 43.00 | | 0.90 | 77.40 | | |
| | Durgaparameshwari Layout 2nd Main 1st Cross S/S | | 2 | 32.00 | | 0.90 | 57.60 | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross N/S | | 2 | 25.00 | | 0.90 | 45.00 | | |
| | Durgaparameshwari Layout 2nd Main 2nd Cross S/S | | 2 | 31.00 | | 0.90 | 55.80 | | |
| | Durgaparameshwari Layout 3rd Main | | 2 | 164.00 | | 0.90 | 295.20 | | |